

Application No. 10/002073

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for dynamically allocating tasks in a computer system, comprising:

assigning a maximum computer resource load to each of a plurality of computer platforms, wherein a first of said computer platforms has a first maximum computer resource capability and load and a second of said computer platforms has a second maximum resource capability and load; providing a computer resources table, wherein indications of maximum computer resource capabilities for each of said plurality of computer platforms are maintained;

assigning a computer resource requirement to a task;

assigning said task to a selected one of said plurality of computer platforms, wherein said task is assigned to said selected computer platform based on said resource requirement of said task and said maximum resource load of said selected platform; and

performing said task in connection with said selected computer platform.

2. (Original) The method of Claim 1, wherein said first computer platform load is not equal to said second computer resource load.

3. (Original) The method of Claim 1, wherein said step of assigning a computer resource requirement comprises assigning a point value to said task.

4. (Canceled)

5. (Currently Amended) The method of Claim [[4]] 1, wherein each of said plurality of computer resources reports a maximum computer resource load amount to said table prior to said step of assigning a task.

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6. (Original) The method of Claim 1, wherein a task is not assigned to a computer platform if doing so would cause said indication of a computer resource load amount of said computer platform to exceed a maximum computer resource load associated with said computer platform.

7. (Currently Amended) The method of Claim 1, wherein said first computer platform is assigned said task, wherein ~~[[a]]~~ said maximum computer resource load ~~amount~~ associated with said first computer platform is exceeded, and wherein said first computer resource rejects said assigned task.

8. (Original) The method of Claim 7, wherein said task is assigned to said second computer platform after said rejection of said task by said first computer platform.

9. (Original) The method of Claim 1, further comprising classifying said task by type.

10. (Currently Amended) The method of Claim 9, ~~further comprising providing a computer resources table,~~ wherein an indication of a computing resource load and of a task capability for each of said plurality of computer platforms is maintained in said table.

11. (Original) The method of Claim 10, wherein said task is assigned to a computer platform listed in said computer resources table according to said computing load and said task capability.

12. (Original) The method of Claim 1, wherein said computer platforms comprise at least one of a processor, an input/output port, an area of memory, and an allocation of bandwidth.

13. (Original) The method of Claim 1, further comprising:
sensing a temperature of a carrier associated with at least one of said computer platforms;

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altering a clock rate of a computer resource associated with a computer platform included in said carrier;

altering a maximum load value of said computer platform, wherein a maximum load value of said computer platform is increased if said clock rate is increased, and wherein a maximum load value of said computer platform is decreased if said clock rate is decreased.

14. (Currently Amended) The method of Claim 1, further comprising:

altering at least one of said plurality of computer platforms, wherein said step of altering comprises at least one of adding, removing, and modifying said at least one computer resource associated with said at least one computer platform.

15. (Currently Amended) A method for dynamically allocating computer processor tasks, comprising:

dynamically specifying a first maximum capability of a first computer processor;

dynamically specifying a first second maximum capability of a second computer processor;

maintaining a computer processor capability table, wherein dynamically adjusted capability values for said first and second computer processors are stored that are related to said first and second maximum capabilities of said first and second computer processors;

receiving a first task requiring processing, wherein a first processor load value is associated with said first task;

determining that said first processor load value of said first task is greater than said first capability of said second computer processor;

assigning said first task to said first computer processor, wherein said first processor load value is less than said first capability of said first computer processor; and

processing said first task using said first computer processor.

16. (Currently Amended) The method of Claim 15, further comprising:

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receiving a second task requiring processing, wherein a second processor load value is associated with said second task;

assigning said second task to said second computer processor, wherein said second processor load value of said second task plus a current load value of said first computer processor is greater than said dynamically specified first maximum capability of said first computer processor and less than said dynamically specified first second maximum capability of said second computer processor.

17. (Canceled)

18. (Original) The method of Claim 16, wherein a second capability parameter associated with said first computer processor is stored in said computer processor capability table.

19. (Currently Amended) The method of Claim 15, further comprising specifying a task capability associated with said first computer processor and with ~~[[a]]~~ said second computer processor, wherein a task of a first task type is assigned to a computer processor having a task capability including said first task type, and wherein a task of a first type is not assigned to a computer resource having a task capability that does not include a task of said first type.

20. (Currently Amended) The method of Claim 15, further comprising:

altering a performance characteristic of said first processor, wherein said step of dynamically specifying a first capability of a first computer processor comprises respecifying a first capability of said first processor.

21. (Original) The method of Claim 20, wherein said altered performance characteristic comprises at least one of a frequency of operation, an operating voltage, and a rate of instructions.

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22. (Currently Amended) A computer resource allocation system, comprising:

at least a first computer platform comprising at least a first computer resource and a second computer platform comprising at least a second computer resource, wherein said at least a first computer platform has a first task type capability and a first resource amount capability, wherein said second computer platform has a second task type capability and a second resource amount capability, wherein said first and second task type capabilities do not have to be the same, and wherein said first and second resource amount capabilities do not have to be the same;

processing software running on a server processor, comprising:

a software task allocation unit, wherein a task is allocated to a selected one of said first ~~[[and]]~~ or second computer platforms based on said task type capability and said resource amount capability, and wherein ~~[[a]]~~ said task is completed in connection with said selected one of said first ~~[[and]]~~ or second computer platforms having a task type capability required to complete said task and a resource amount capability sufficient to complete said task; and

memory including a table, wherein said first and second resource amount capabilities of said first and second computer platforms are stored.

23. (Currently Amended) ~~The system of Claim 22, wherein said software task allocation unit further comprises:~~

~~a software table, wherein an entry for said at least a first computer platform is maintained in said table, and wherein for each such entry a task type capability and a task resource amount are specified.~~

24. (Original) The system of Claim 22, wherein said task resource amount is dynamically altered in response to a change in a resource amount capability of said at least a first computer platform.

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25. (Original) The system of Claim 24, wherein said change in a resource amount capability is in response to a substitution of said at least a first computer resource with said second computer resource.

26. (Original) The system of Claim 24, wherein said change in a resource amount capability is in response to a modification of an operating parameter of said at least a first computer resource.

27. (Original) The system of Claim 26, wherein said modification of an operating parameter of said at least a first computer resource comprises a modification of at least one of a frequency of operation, an operating voltage, and a rate of instructions.

28. (Original) The system of Claim 24, further comprising a temperature sensor, wherein said change in a resource amount capability of said at least a first computer resource is made in response to a change in temperature sensed by said temperature sensor.

29. (Original) The system of Claim 22, wherein said at least a first computer resource comprises at least one of a computer processor, an input/output port, an area of memory, and an allocation of bandwidth.

30. (New) The method of Claim 1, wherein at least one of types of tasks that said plurality of computer platforms are capable of performing and current loads assigned to said plurality of computer platforms are maintained in said computer resources table.